

UG 210-21-12 ENG - HEC-RAS 6.0 Computer Program and Documentation

User Guide: UG 210-21-12 **Date:** August 19, 2021

Subject: ENG - HEC-RAS 6.0 Computer Program and Documentation

Purpose. This user guide announces the availability of the U.S. Army Corps of Engineers (USACE) Hydrologic Engineering Center – River Analysis System (HEC-RAS), version 6.0, computer program and explains how to obtain the software and documentation.

Effective Date. Effective upon receipt.

Background. HEC-RAS is a hydraulic modeling software package developed by the USACE-HEC in Davis, CA, to perform hydraulic calculations for a full network of natural and constructed channels. Users evaluate stream hydraulics and water surface profiles for purposes such as watershed analyses, stream restoration projects, dam breach analyses, wetland restoration, and flood control studies using HEC-RAS. Version 6.0 corrects bugs in the previous versions and includes several new features and upgrades. Of particular note, version 6.0 can make use of spatially and temporally varied precipitation and infiltration in 2D Flow Areas, Storage Areas and between 1D cross sections. Users can also model bridge hydraulics inside of 2D Flow Areas and utilize HECRAS Mapper Editing Tools within RAS Mapper. Full documentation of changes is available on the “What’s New” page at https://www.hec.usace.army.mil/software/hec-ras/whats_new.aspx.

HEC developed HEC-RAS for the Corps but distributes the software freely to the public for use without restriction. The user assumes all responsibility for the accuracy and suitability of this program for a specific application. HEC does not provide assistance or support for this software to non-Corps users. NRCS established an internal support framework for HEC-RAS. See the contact information below on reaching out for assistance.

Special Instructions. HEC-RAS 6.0 updates and replaces all previous versions of HEC-RAS. This directive cancels, deletes, and replaces the previous notification - User Guide UG-210-19-6, “HEC-RAS 5.0.7 Computer Program and Documentation,” dated September 4, 2019.

Distribution. NRCS tested and CCE certified HEC-RAS 6.0 for deployment to NRCS Information Technology Service (ITS) supported workstations running Windows 10 x64. The project reference number is RFC CRQ4005652.

NRCS users are to obtain HEC-RAS 6.0 through NRCS Software Center or contact their ITS support managers, who can download and install the program. Users running the existing 6.0-Beta version of HEC-RAS must submit a ticket and work with local ITS support staff to uninstall existing 6.0-Beta versions from their machines prior to installing the full 6.0 software. NRCS makes no official printing or distribution of program documentation, but it can be downloaded from the web at <https://www.hec.usace.army.mil/software/hec-ras/documentation.aspx>.

Filing Instructions. Users wishing to retain paper copies of any of the HEC-RAS documentation should place it in a three-ring binder adjacent to other technical directives.

Contact. NRCS established an internal support framework specifically for HEC-RAS. NRCS users may find information on contacting the HEC-RAS support team through their web page at <https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/water/manage/hydrology/?cid=stelprdb1043470> or contact Jacob

Dieguez, Hydraulic Engineer, Water Quality and Quantity Team, at jacob.dieguez@usda.gov or (443) 699-5226.

Contact the National Hydraulic Engineer, Conservation Engineering Division (CED), by telephone at (202) 720-0772 or email to claudia.hoeft@usda.gov with questions regarding this directive.

/s/

DIANE GELBURD
Deputy Chief for Science and Technology

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